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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER  
LLP  
901 NEW YORK AVENUE, NW  
WASHINGTON, DC 20001-4413

EXAMINER

CHANNAVAJALA, LAKSHMI SARADA

ART UNIT PAPER NUMBER

1615

DATE MAILED: 07/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/092,530

Applicant(s)

DUBIEF ET AL.

Examiner

Lakshmi S. Channavajjala

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 30,32-39,42-50,52-59 and 61-68 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 30,32-39,42-50,52-59 and 61-68 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

Receipt of RCE, amendment and remarks all dated 6-20-05 is acknowledged.

Claims 30, 32-39, 42-50, 52-59, 61-68 are pending.

#### *Claim Rejections - 35 USC § 103*

Claims 30, 32-39, 42-50, 52-59 and 61-68 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 4,744,978 to Homan et al (Homan) al in view of WO 93/23009 (WO '009).

Homan teaches a hair treating composition comprising cationic polymer and a carboxy functional polydimethyl siloxane containing a carboxy functional group; and using the composition as a hair fixative, in the form of aerosol, spray etc. The carboxyfunctional polysiloxanes of Homan are described in col. 3-4, which possess a silicone chain to which are attached carboxyfunctional radicals such as carboxyalkylthio radicals linked to silicon atoms via a divalent alkylene radical that meet the variable (G<sub>2</sub>)<sub>m</sub>-S-G<sub>4</sub> of the instant claims. However, Homan does not teach a polymer residue of at least one anionic monomer containing ethylenic unsaturation, as claimed in the instant polysiloxane skeleton. Homan teaches cationic polymers including quaternary ammonium derivatives of cellulose ethers, copolymers of vinylpyrrolidone and dimethylaminomethacrylate; terpolymers of vinylcaprolactum, vinylpyrrolidone and dimethylaminoethylacrylate etc., (col. 4, lines 54 through col. 5, lines 11), which read on the claimed cationic polymers of claims 49-50. Homan also teaches preparing a solution or dispersion of the cationic polymer, with solvents such as ethanol. Homer further

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teaches thickeners, perfumes (col. 6, lines 26-39). Homes also teach the same hair treatment with the compositions as claimed. Homan does not the polysiloxane skeleton containing the specific non-silicone organic monomers of the instant claims.

WO '009 teaches cosmetic compositions containing vinyl silicone graft or block copolymers. The vinyl-silicone copolymer of WO '009 contains a silicone backbone with a vinyl polymeric segment grafted on to the backbone (structure on page 8). The vinyl polymeric segment represented by "A" includes the claimed monomers of instant claims 33-39 (pages 11-14). Applicants also admit that the suitable polysiloxane polymers for present invention include those taught by WO '009 (page 1, lines 21-26). Further, WO '009 teaches 0.01% to 30% by weight of vinyl-silicone copolymers in hair care products such as shampoos, hair rinses, hair setting products (pages 40-41). WO '009 teaches the hair care products in the form of liquid, cream, gel, rinse-off or leave-on products etc (pages 40-43). WO '009 also teaches aerosol sprays, pump sprays etc., for setting hair in the desired style (page 41, examples 26-30). In particular, WO '009 teaches skin care and hair care compositions and teaches that the silicone polymers when incorporated in hair care compositions impart excellent brilliance, gloss, conditioning and style retention to hair without stiff or sticky feel (page 7, lines 17-20). WO '009 particularly teaches that for hair care compositions, the vinyl-silicone polymers can be used in combination with conventional polymers such as anionic, cationic or amphoteric polymers (page 42, lines 21-26).

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Thus, both Homan and WO '009 teach preparing hair care composition in the form of aerosols containing the claimed silicone polymers and cationic polymers, thus constitute analogous art. WO '009 also teaches the amount of silicone polymer and solvents that include the claimed ranges. Accordingly, it would have been obvious for one of an ordinary skill in the art at the time of the instant invention to use the polysiloxane polymers of WO '009 in the composition of Homan containing cationic polymers because WO'009 teaches that their silicone polymers is an improvement over the conventional silicone polymers used in hair care composition as the polymers form a good water-resistant and friction-resistant film, and provide excellent gloss, brilliance, conditioning and style retention without any sticky feeling as compared to the conventional silicone polymers, among which WO '009 refers to silicone polymers of Homan et al. Accordingly, one of a skilled artisan would have expected an improved conditioning, style retention without sticky feeling with the silicone polymers of WO'009 in the composition of Homan with an expectation to provide excellent brilliance, gloss, conditioning and style retention to hair without stiff or sticky feel.

### ***Response to Arguments***

Applicant's arguments with respect to claims 30, 32-39, 42-50, 52-59 and 61-68 have been considered but are moot in view of the new ground(s) of rejection.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lakshmi S. Channavajjala whose telephone number is 571-272-0591. The examiner can normally be reached on 9.00 AM -6.30 PM

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman K. Page can be reached on 571-272-0602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Lakshmi S Channavajjala  
Examiner  
Art Unit 1615

July 8, 2005